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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,173	02/28/2002	Ulrich Adams	32860-000203/US	9536
30596	7590	09/20/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			SENF, BEHROOZ M	
P.O.BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	

2621

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/980,173	<b>Applicant(s)</b> ADAMS, ULRICH	
	<b>Examiner</b> Behrooz Senfi	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 8-10,12-14,16 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-10,12-14,16 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's arguments filed 07/05/2006 have been fully considered but they are not persuasive.

Response to remarks:

Applicant asserts (remarks, page 6, last paragraph and page 7, lines 2 - 4) that, Qureshi does not disclose, teach or suggest any translational rail that enables a video camera and lighting arrangement to be moved along the translational rail in a translational motion.

In response:

With respect to applicant first arguments: it is submitted that claim language broadly recites "a translational rail wherein the video camera and lighting arrangement are mounted on the translational rail so as to be movable in translational motion" without any specifics regarding the translational rail in a translational motion. In view of the above, Qureshi (i.e. figs. 1 – 6) clearly shows the translational rail wherein the video camera (41) and lighting arrangement (fig. 8, 49 and 50) is mounted on the translational rail, which are movable.

Applicant asserts (remarks, page 8, lines 10 – 15) that, combination of Tolino and Qureshi fail to disclose, teach or suggest "a self-supporting, telescopically extendable C-shaped rail including a plurality of curved telescopic segments, by way of which the carrying framework is capable of traveling, wherein the C-shaped rail is designed to move the carrying framework through an annular combustion chamber".

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In response:

With respect to applicant second arguments, examiner relied upon the combined teaching of Tolino (fig. 1) and Qureshi (figs. 2 – 6). Qureshi teaches a self-supporting (fig. 5, elements 31 – 34, are self supported) extendable flexible inspection arms (figs. 2 – 6), which can be extended to different length and /or compressed and are adjustable to different shape and position, for inspection purpose. In view of the above, it is submitted that the self-supporting extendable flexible inspection arms as taught by Qureshi has the same functionality and meets the limitation “telescopically extendable” as broadly claimed.

In view of the above claims 8 – 10, 12 – 14, 16 and new claim 19, are finally rejected for the same reason as set forth in the last office action. The rejections are being restated for applicant convenience.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8 – 10, 12 – 14, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolino et al (US 4,654,702) in view of Qureshi et al (US 5,956,077).

Regarding claim 8, Tolino '702 teaches a remote controlled inspection device (fig. 1: 30) for an annular combustion chamber of a gas turbine (i.e. steam vessel, col. 3, line

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18, Note: steam qualifies as a gas) including an inner internal wall portion and an outer inner wall portion (fig. 2 shows an inner/outer portions of wall 15a) comprising: a remotely steerable drive mechanism (30) and a movable video camera (110) and a lighting arrangement (col. 7, lines 36 - 39) and carrying framework for the video camera, for the drive mechanism and for the lighting arrangement, including lower frame and an upper frame restable upon the inner internal wall portion and outer internal wall portion of the annular chamber (i.e. the carriage itself 30), and a plurality of wheels being mounted on both frames for moving the carrying framework in the peripheral direction of the annular combustion chamber along the inner internal wall portion and outer internal wall portion (figs. 2, 4, wheels 33 - 36 and 95), and means for transmitting video images from the video camera to an evaluation arrangement (the images are being transmitted to control unit 21, which includes a video monitor, col. 7, lines 34 - 35). Tolino '702 teaches, using cameras 110, which is attached to the mast assembly 60, for inspection purpose. But is silent in regards to, a translational rail on one end of the inspection device, wherein video camera and lighting arrangement are mounted on the translational rail so as to be movable in transitional motion.

Qureshi '077 (figs. 4 and 8), which shows a remote visual inspection device, including rotatable camera 48 (col. 1, lines 65 - 66) and lightening 49 and 50, which are mounted on the transitional rail (39, i.e., gimbal support or carrier) movable in translational motion along the translational rail, which enabled more precise remote visual inspection of the internal surfaces.

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In view of the above, taking the combined teaching of Tolino and Qureshi as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the mast assembly 60 of Tolino by using a transitional rail as taught by Qureshi for a more precise remote visual inspection of the internal surfaces.

Regarding claim 9, combination of Tolino '702 and Qureshi '077 teaches, the drive mechanism includes an electric motor and wheels (i.e. fig. 4, motor 51, col. 9, lines 28 - 30 of Tolino).

Regarding claim 10, combination of Tolino '702 and Qureshi '077 teaches, four wheels are mounted on the lower frame and on the upper frame (Tolino, fig. 2, wheels 95 and 36).

Regarding claim 12, the limitations claimed have been analyzed and rejected with respect to claim 8 above).

Regarding claim 14, the limitations claimed is substantially similar to claim 8 above, therefore the grounds for rejecting claim 8 also applies here. Furthermore, Tolino '702 is silent to explicitly mention, "telescopically" extendable C-shaped rail. However, Qureshi '077 (i.e. figs. 4 - 6, arms 31 - 35) teaches extendable flexible inspection arms (figs. 2 - 6), which can be extended to different length and /or compressed and are adjustable to different shape and position to enhances flexibility of the inspection.

It is submitted that the self-supporting extendable flexible inspection arms as taught by Qureshi has the same functionality as to "telescopically extendable arms" as broadly claimed.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the mast assembly 60 of Tolino by using a self-supporting extendable flexible inspection arms as taught by Qureshi to enhance flexibility of the inspection device for inspecting of the inner surfaces of difficult access locations.

Regarding claims 16, combination of Tolino and Qureshi teaches, supporting C-shaped rail enables navigation of the combustion chamber without the need to contact the surface (Qureshi, fig. 4, arm 31 - 41).

Regarding claim 19, the limitations claimed have been analyzed and rejected with respect to claim 14.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

**(571) 273-8300**

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is **(571) 272-6000**.

B. M. S.

9/14/2006

*Mehrdad Dastouri*  
**MEHRDAD DASTOURI**  
**SUPERVISORY PATENT EXAMINER**  
TC 2600